

CAUSES OF INSANITY.

AN ADDRESS

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THE sole business of the physician is with disease as it presents itself to him. Professionally he is not presumed to know men in health, except as they arrive at that high condition from a lower and a diseased state through his means.

Yet, as we are called upon to guide and to aid diseased and weakened men in their upward progress to their original point of health, we may find some aid from knowing the history of their progress downward. It is, therefore, more than a matter of curiosity to know the early history of the cases which we are called upon to treat, the preecedent events, acts, exposures and influences which may be assumed as the causes of the change from the healthy to the unhealthy condition—which induced the first step of the disease or urged its succeeding progress.

This might be an interesting study for a week, or a month, or a year, to range through the whole catalogue of diseases, and investigate all their causes. But the few minutes which we, now and here, can devote to this consideration, must limit me to the history of the causes of a single disease. I have, therefore, selected one, of the greatest interest to myself, and, I trust, of sufficient interest to the gentlemen of this Society—that is, *Insanity*.

In saying that I select insanity as a single disease, I would not be understood to imply, that insanity is always one and the same disease; that like the marble statue it is composed of the same elements, and presents the same form and phase, and the identical expression at all times. But like the expressions of the human countenance, there may not be two cases of insanity exactly alike. Though there may be the same general form and the same elements, yet the combinations of these elements are so various that a minute description of any one case will not completely fill the outline of any other.

Insanity may properly be assumed as a class of diseases, and the name, like the term dyspepsia, be considered rather as generic than specific; for as one includes the manifold derangements of the digestive or-

gans, so the other includes the manifold derangements of the brain—the mind and the moral affections.

Many writers have attempted to describe insanity in a few lines; physicians for nosological purposes, law-givers for legal purposes, and judges for juridical purposes, have all tried it; but hardly two of their descriptions are alike; and one might suppose that they had in their minds different diseases; and very probably they had as their ideals different cases or phases of it, when they described it.

Without attempting any accurate description here, I presume I shall be sufficiently understood if I merely say, that, by the term insanity, I intend to include the perversion or the impairment of the mind or of the moral affections, either entire or partial.

But our present business is not so much to determine what insanity is, as what its causes are.

In forming an opinion of the kinds, frequency and proportion of the several causes of insanity, or of the various conditions out of which this disease or this class of diseases grows, the reports of lunatic hospitals must be resorted to. Inasmuch as these reports are prepared by medical superintendents, who have the largest field of observation, and many of whom have taken great pains to ascertain and report these causes, they are now the only sources to which we can reasonably look for such facts as will justify any conclusion in this matter. I have therefore consulted the reports of the establishments, public or private, for the cure or the custody of the insane, in various nations. There are 119 French, 37 Belgian, 2 German, 159 English and Welsh, 8 Scottish, 12 Irish, 1 Canadian, 20 American—358 hospitals or establishments, in all.

From some of these establishments, I have the reports of all the patients that have been received since their first beginning, which run back to 1751 in regard to St. Luke's in London, and to 1719 in regard to Tice Hurst in England, and other reports cover periods varying from fifty years down to one year, as those of all the French hospitals.

In the whole of these reports we have the accounts of 144,766 patients that have been submitted to their care. But the causes of only a portion of these 144,766 cases are given. The Parliamentary Reports of the British and Irish hospitals state the causes of the lunacy of only those who have been received within the last five reported years. Some of the American reports give no causes at all, and all the reports, in every country, give a large part of their cases as arising from causes unknown. We have, therefore, the causes stated of only 32,214 cases of lunacy.

The kinds and numbers of these causes or classes of causes differ in different nations according to their habits of minute division and classification. The British reports reduce these to sixteen causes or classes of causes, at most, and some give as few as eight. The French reports give twenty. But the American reporters make much more minute divisions. Thus, from the Asylum at Bloomingdale, New York, we have eighty-five causes; the Western Virginia, at Staunton, seventy-five; the New York State Asylum, at Utica, sixty-five; the Pennsylvania Hos-

pital at Philadelphia, thirty-four ; and the reports of all the asylums of the United States give one hundred and eighty-one different causes of insanity. But as ten of these are synonyms of others, they may be reduced to one hundred and seventy-one different causes of insanity in America. The following enumeration shows through what channels or by what means insanity has come upon the people of this country.

CAUSES OF INSANITY.

PHYSICAL CAUSES.

	<i>Congenital.</i>		Menstruation suppressed at change of life
Old age			Hysteria
“ irregular decay of powers			Pregnancy
	<i>Diseases.</i>		Abortion
Arachnoiditis			Parturition
Convulsions			Puerperal
Phrenitis			Cold in childbed
Congestion of brain			Lactation
Disease of brain			Ill health
Neuralgia			“ and solitude
Nervous irritation			“ perplexity in business
Excessive pain			“ family trouble
Dysentery			“ pecuniary difficulty
Dyspepsia			“ lawsuit
Erysipelas			
Phthisis			<i>Injuries.</i>
Measles			Brain, concussion of
Gout			“ lesion of
Rheumatism			Head, blow on
“ bilious			“ fracture of
Fever, typhus			“ burn on
“ nervous			“ malformed
“ intermittent			Wound, gun-shot
“ scarlet			“ punctured
“ yellow			Fall
“ bilious			Kick on stomach
Gastritis			Surgical operation
Spine, irritation of			Tight lacing
“ disease of			Mesmerism
Suppression of hæmorrhoids			White lead, working in
“ perspiration			Acetate of lead
“ eruption			Vapor of charcoal
“ fistula			“ carbonic acid gas
“ tumor			“ prussic acid
“ secretions			“ metallic
Smallpox			Quinine, excess of
Varioloid			Insolation
Sexual derangement			“ and drinking cold water
Uterus, disease of			Heat, excessive, exposure to
Menstruation, irregular			Cold, exposure to
“ profuse			Cold water, bathing in
“ suspended			Excessive labor

Bodily exertion	Intemperance in smoking	
Loss of sleep	“ snuff	
Sedentary life	“ opium eating	
Want of exercise	Masturbation	
Idleness	Syphilis	
Dissipation		TOTAL, 93.
Intemperance in spirit		

MORAL CAUSES.

Mental labor and excitement	Sickness and death of friends	
“ fatigue	“ “ kindred	
“ shock	Murder of son	
“ perplexity	Anxiety	
Study, excessive	“ and loss of sleep	
“ of metaphysics	“ for absent friends	
“ of phrenology	Homesickness	
Excitement of lawsuit	Lost in the woods	
“ politics	Disappointment	
“ Mexican war	“ in love	
“ visiting	“ in ambition	
“ sea voyage	Love unrequited	
License question	Domestic affliction	
Anti-rent	“ trouble	
Application to business	Family	
Fourierism	Bad conduct of children	
Preaching sixteen days and nights	Ill treatment	
Blowing fife all night	“ of husband	
Rehabitism	Abuse of husband	
Reading vile books	Ill treatment of parents	
Seclusion	Infidelity of husband	
Avarice	“ wife	
Anticipation of wealth	Seduction	
Speculation in stocks	False accusation	
“ morus multicaulis	Imprisonment for crime	
Dealing in lottery tickets	Difficulty in neighborhood	
Perplexity in business	Passion, ungoverned	
Pecuniary difficulties	Violent temper	
Disappointment in business	Jealousy	
Loss of money	Pride, mortified	
“ property	Faulty education	
Reverse of fortune	Duel	
Want of employment	Fright	
“ occupation	Celibacy	
Fear of poverty	Religious anxiety	
Destitution	“ excitement	
Death of relatives	Remorse	
“ husband	Millerism	
“ father	Mormonism	
“ son		
“ friend, sight of		
		TOTAL, 80.

There may be errors in this imputation of causes. They are taken often from the mouths of unprofessional friends, who are unused to nice discrimination, and whose imagination may sometimes have something to

do with their notions of facts. And some of these facts, which they suppose to be causes, may have been merely precedent, or co-existing, or even subsequent events. And some may have been rather the consequences or results, or even a part of the disease itself, rather than its cause. As sometimes when a man's brain becomes excited and his mind unbalanced, he runs into wild speculations, in which he becomes excited still more. These speculations then may seem to his friends to be the original cause of his excitement. Some other persons, in certain excitable states of the nervous system, crave ardent spirits, which is then the consequence or a part of the insanity, and not its cause.

In many cases of insanity, there are several causes, or precedent facts that may be assumed as causes, of the derangement. As a lunatic may be the son of an insane parent; this would indicate his disease to be hereditary. He may have been intensely and anxiously engaged in trade; his derangement may therefore be said to arise from excessive mental action in business; and after all his labor and anxiety, when success and fortune were just within his grasp, an unlucky speculation or turn of the times may have snatched the whole from him, and all was lost, then his insanity might be imputed to disappointment in business. Besides all this, he may have been intemperate, and then his lunacy may be charged to intemperance.

This is indeed an extreme case, yet it may have happened. And it is not uncommon for two or more of the events or facts, that are here enumerated as causes, to have happened to a lunatic previous to his disease. As a student excessively engaged in study is also dyspeptic, and then becomes insane, and he not unfrequently adds masturbation to these causes of mental disturbance. An intemperate man very frequently manages his affairs indiscreetly, and becomes embarrassed or poor: or if he holds a public office he loses it, and is therefore disappointed. Either or all of these may be assumed as the cause or causes of the mental disorder.

In these cases, and others of similar character, there is an opportunity of selection of causes, to which the insanity is imputed. If, then, the physician or officer who makes the examination and reports the cause, has any theory of the paramount power or prevalence of certain cause or causes, he can hardly avoid selecting this or these as the leading or sole cause, above, and in preference to, others which may have existed and co-operated, or even had primary influence in inducing the disease.

Hence we find, that under the administration of some minds with one ruling idea as to the prevalence or power of certain customs in producing mental disorder, one cause or class of causes has a marked prominence or frequency in the catalogue: while under another mind, with another ruling idea, another cause or class of causes seems to have a leading disturbing influence upon the brain.

Thus if one has a strong conviction, that the general plans of educating the young stimulate their minds or excite their brains to a dangerous extent, or that the general interest and active engagements in political strife, or the earnestness with which men in this country usually engage in business, are injurious to regularity of cerebral action and mental

health, he will find a very large portion of his patients to be made insane from excessive mental action. Or if he believes the use of alcoholic stimulants to be injurious to the brain and mind, he will find no small portion of the insanity that comes under his notice to be chargeable to intemperance, because there are very many who have used spirit in some degree, and many who have been excessively industrious students in schools or elsewhere, or very attentive to business or politics.

To these different states of mind of the examiner or reporter may be attributed, in part at least, the difference of proportions of cases produced by different leading causes, received into hospitals from people and communities of similar habits and character.

I would not suggest a doubt, that these events or habits did exist, and were partially or entirely the causes of the lunacy: but whether they were the sole causes, and in all cases the leading causes, is a matter upon which there may be some difference of opinion.

It is very common with writers on insanity to divide these causes into two classes—the Physical and the Moral.

1st, The Physical, which produce their primary effect on the physical structure of the brain or some other organs, and disturbing the cerebral actions, produce their secondary effect on the mental operations; as a blow on the head, or epilepsy, or a disordered stomach, or the puerperal condition, suppressed excretion, &c.

2d, The Moral causes, which act directly on the mind itself; as excessive study, disappointment, grief, trouble, &c.

The brain has a fourfold office to perform. It is the seat of the mind. Not that the brain is the mind itself, nor even that the action of the brain merely is mental action. But through the brain alone the mind operates and is manifested here, and it alone is the organ of mental action. Therefore the operations of the mind are essentially connected with the condition of the brain. Whenever that is torpid, as in apoplexy, the mind appears to be torpid; whenever the brain is excited, as in intoxication, the mind is excited; and whenever the brain is uncertain or irregular in its action, the mind is wayward and its operations are deranged.

The moral affections, the emotions and feelings and passions, are connected with the brain in the same way as is the mind. Not that the brain loves, and hates, and feels the force of passion primarily; but it is through the brain that these affections and passions are manifested. Thus when the brain is in a certain condition, as in some stages of epileptic mania, the most malignant passion and hatred are shown; and in some other conditions there appears the warmest love. In other conditions there is a propensity to destroy or to fight. There may be high and exhilarating hope, or deep depression and despair, connected with different states of the cerebral organ.

The brain is also the seat of sensation; it perceives all that seems to be perceived in the organs of special sense and throughout the whole frame.

Besides these connections of the brain with the mind, the moral affections, and the organs of sense, it has direct and intimate connection with all the organs and parts of the body, by means of the nerves. Through

them the brain receives impressions of sensibility from every part, and through them it sends power of action to all. Thus when any part feels cold or hot, or pain or comfort, this impression is received first upon the outer extremity of the sensory nerve, and is then sent along the nervous cord, to the brain, when it is felt, and sensation is created by the cerebral action. Again, when we walk, the stimulus of muscular contractions is sent from the brain along the trunk of the motor nerves to the muscles which produce the motion. In like manner the stomach, liver, kidneys, &c., receive their powers of specific action through the nerves that connect them with the brain.

As these nerves connect all the parts of the body with the brain, and all these various parts receive their life and power of action from it, and all send their impressions to it for sensation, it will readily be supposed that there must be an intimate connection and sympathy between the cerebral and the other organs of the body.

I must not be understood as determining or explaining, now and here, how the brain acts to produce thought, or rather to allow thought to be produced through it, or sensation to be felt, or how it sends the stimulus or power of action to the motive parts. Nor can I explain whether these duties are performed by certain or special parts of the brain acting for the motive apparatus, and certain other parts acting for the organs of sense and sensibility, and other parts for the various passions and affections, and still other parts for the several faculties of the mind; or whether the whole brain acts in various manners for each of these different purposes, at one time and in one way acting for some faculties of the mind, at another time and in another way acting as the organ of sensation, and at another time in a different manner controlling the actions of the organs and the contractions of the muscles.

Be this as it may, it is sufficient for my present purpose to say, that the brain is the organ of the mental and moral operations, the seat of sensation, and the source of motor influence.

The connection and sympathy between the brain and all the other organs, and the cerebral functions with all the other functions of man, then, is intimate and complete. The brain must therefore be disturbed by their derangements and suffer from their embarrassments and pains.

If the whole brain act together, though in a different way and capacity for the different purposes, then any disturbance communicated to it from any organ through the nerves may unfit it, in a greater or less degree, for action in any other capacity. Thus the intense pain of the gout or the toothache may impair the freedom, if not suspend the power of mental action. A disorder of the liver may so disturb the brain, that it cannot freely act and manifest the emotion of cheerfulness to the full or healthy extent. Some pulmonary diseases may send to the brain such a disturbing influence as to suspend the complete manifestation of love and confidence, and even compel the exhibition of suspicion and hatred.

If the different parts of the brain perform the different offices, then the disturbance of one part arising out of the irritation received from remote organs, through the nerves, may be communicated, by sympathy or otherwise, to other parts which are contiguous; as the disturbance of the

liver may affect the stomach, and that of the uterus may trouble the bladder.

Thus, on either supposition of the distribution of the cerebral forces, the affections of the brain are connected with the affections of all the other organs; and therefore the healthy performance of the mental and moral functions is dependent on the healthy action not only of the brain, but of the stomach, liver, and the other organs of the body.

On the other hand, the state of the brain affects all the other organs: it aids and energizes, or it disturbs and impedes their operations. A person who usually has a good and regularly recurring appetite, when he is intensely absorbed in business or study may feel no hunger and forget to dine. When under the power of intense anxiety, as a mother watching over the doubtful sick bed of a child, or a merchant in times of commercial embarrassment and distress, they lose their appetites; and if this be long continued, their digestion becomes impaired, or even lost. Under the same controlling influence of absorbing interest or anxiety, men sometimes do not perceive pain or injuries from causes which commonly produce suffering; as in the excitement and anxiety of battle, an officer may not know that his flesh is wounded by a sword or a musket ball, until, at the end of the strife, the suspension of the anxiety and excitement allows him to attend to and perceive it.

In certain kinds of cephalæa, there is great nausea and general prostration. The mind and the body are equally unable to perform their accustomed labors. Whether the disordered stomach or the disturbed brain be the primary affection, it is needless here to prove: but certain it is, that in this class of cases there is an intimate connection between the brain and the digestive organs.

In consequence of this intimate connection of mind with the brain, and of the brain with the other bodily organs, we find that bodily disorders and injuries are among the most prominent and frequent causes of insanity. In the list taken from the American hospital reports, there are forty-four specified diseases, more than thirty accidents or injuries, and several kinds of dissipation or abuse of the physical organs. Fifteen of these diseases and accidents are connected with the brain and nervous system. Six are fevers. Eight are suppressions of accustomed discharges or secretions, besides the menstrual. Nine are connected with the female organization and functions.

We have no reason to suppose that these are all the kinds of bodily disorder or injuries that can give rise to mental disorder, although they are all that are presented to us in the American and British and French hospital reports. Writers upon insanity add others; as hydrocephalus, ulcers, excessive irritability, suppression of lochia, indigestible food, starvation, worms, suppression of issue or seton, hereditary taint, dentition, convulsions in infancy, and various noxious influences. The Norwegian Report gives "sleeping in a barn filled with new hay" as a cause of lunacy.

Some of these physical diseases, which are stated as causes of mental disease, are in themselves generic and include other and subordinate classes. The term "Ill Health" might be divided into almost the whole range of the nosology.

The French reports do not make exactly the same classification of the sources of insanity as the British and American reports do. Therefore, in the minute statement and comparison of causes, I take only the latter, which include 22,113 cases whose causes are ascertained and reported.

Bodily disorders, ill health, injuries, &c., caused 3,667 of all the cases whose origin was known and reported, or 188 in each 1000.

The use of alcoholic stimulants, which always excites the nervous system, and sometimes to a very high degree, and leaves it in a corresponding and sometimes in a complete exhaustion after the excitement is over, would very reasonably be supposed to disturb the regularity and certainty of the cerebral functions, and create more than momentary mania. Consequently the great prevalence of the habit of intemperance has resulted in the addition of 2,896 out of 22,113 cases, which is a little more than 13 per cent. of all from known causes.

The use of opium and tobacco is given as the causes of some cases of lunacy; not to the extent of alcohol, but in their degree they are dangerous to mental health.

Among the most melancholy causes of cerebral disease are the secret abuse of the genital system, and sexual indulgence. The British reports do not mention masturbation, but very probably this is included in their class of "vice and sensuality." The mental disorders that arise from this class of causes are among the most deplorable and incurable. They amounted to 1049, or about one twentieth of all from known causes.

The puerperal condition, lactation, catamenial irregularities, all the difficulties connected with the female organization and function, are somewhat prolific sources of insanity. They produced 926 cases, being about one twenty-fifth of all, and about one eleventh of the cases of female lunacy.

The hereditary nature of insanity is remarkably manifested in this investigation of the health and constitution of the parents, ancestors, and other relatives of the patients who are offered at the hospitals.

According to the British reports, twenty-two per cent. of all whose history was ascertained, owe their lunacy solely to their hereditary taint. But American authors and reporters generally consider the hereditary taint to be only a predisposing cause, which is dormant until some other influence becomes an exciting cause and sets the first into action. Among the children of insane families only a part of them ever become lunatics. Whether all inherit the taint equally, and have equally imperfect cerebral organization or power, but are presumed to be sound until some new and exciting cause develops the insanity in those on whom it falls; or whether only a part inherit this taint and imperfect organization, and they become insane from causes which fall alike upon all but act only on those whose brains are naturally unsound, I cannot say, nor is it here necessary to know. But certainly this said heritage of insanity is found in so many members of the same family, and is so often manifested in successive generations, that there can be no doubt that the imperfection of brain and the tendency to insanity descends from parents to children and to children's children.

Our genealogies are not constructed for the highest purposes of humanity. We cannot trace the sanitary history of families backward through many generations. We cannot speak in the confidence of knowledge of the descent of this heirloom. Yet I have now the history of one family in which there has been insanity for five generations, and of another family in which it has been for four generations; and how much longer it will continue in these families, remains for time to show.

In a history of the Asylum at Bloomingdale, New York, Dr. Earle speaks of eleven hundred and eighty-six patients whose history was known. Of these, three hundred and twenty-three were presumed to have hereditary taint, and eleven of these were of the third insane generation. Twelve hundred and eighteen of the three thousand six hundred and forty-eight patients whose history was known in the Lunatic Hospitals at Worcester, Mass., Mount Hope in Maryland, and Columbus, Ohio, inherited the taint. This is about one third of all. In the British and Irish hospitals the proportion of hereditary cases is less, being three thousand five hundred and fifty-four in fifteen thousand nine hundred and sixty-nine cases, or between one fifth and one fourth of all.

The subject of hereditary descent, as manifested in insanity, idiocy, and in many other diseases or imperfections of organization, is yet to be investigated. The field is a broad and untrodden one, and is worthy of the labor of the student of physiological and pathological science. And it is to be hoped, that we shall not let this study be exhausted on our cattle and horses, whose pedigrees and hereditary powers have been traced and published with great care. The same attention would find a nobler subject in man—to learn how far the health and power of the human race is deteriorated by indiscreet marriage, and how far they may be improved by faithfully attending to the laws of hereditary descent, and by securing in the parent the virtues and the powers and the constitution that are desirable in the children.

There is no doubt that the tree must declare itself by its fruit, so that it can be thereby known. So the constitution of the parent must be manifested in the child, and he inherits that power or weakness, that perfectness or imperfectness of organization, which the parents possessed when they imparted the element or the pabulum of life. Hence we have many imperfect brains and much hereditary insanity.

Moral Causes.—The moral causes are, according to the record, almost as abundant as, and probably they are really more abundant than, the physical causes. There are eighty of these specified in the American hospital reports. Authors of works on insanity add others. Pinel adds sudden joy, hope, jealousy, remorse, envy, extatic admiration of works of art, the struggle between the religious principle and the power of the passions. Esquirol adds misanthropy, epidemic influences,* political commotions, which unnaturally excite the intellectual faculties, exalt the melancholy and hateful passions, revenge and ambition, and

* As there are certain atmospheric conditions which render epidemic and contagious diseases more or less frequent, so there are in the spirits certain general dispositions which cause mental alienation to extend, propagate and communicate itself to a great many individuals by a sort of moral contagion.—ESQUIROL, *Maladies Mentales*, I. 63.

reverse the public and private fortunes of men ; and undue parental severity. These causes may be reduced to five classes.

1st. Over or undue action of the mind ; excessive study ; devotion to special investigations ; great mental labor in business, in politics, law-suits, &c. ; all sorts of mental excitements.

2d. Causes connected with the affections, feelings and emotions ; grief, disappointment, anxiety, homesickness, troubles and trials from persecutions of friends or others, fright and fear.

3d. Religious causes, growing out of the hopes, fears and anxieties connected with the eternal interests.

4th. Causes connected with property and poverty.

5th.—Causes connected with the violent and malignant passions and temper.

These moral causes operate upon the mind alone—they reach the brain through its functions and produce disturbance. As violent labor or long protracted exertion of the body, producing excessive action of the muscles, may produce muscular debility or disease ; so excessive action of the mind, either by intense or long-protracted study, may result in debility or disorder and irregular action of the brain. Or as the attempt of the stomach to digest improper food, which it perhaps may overcome with painful difficulty, or perhaps, after all its distressing struggle, fails to dissolve, produces gastric disturbance, and, as this injudicious dieting if long continued produces dyspepsia in some of its forms, and even an inability of the stomach to digest the common food with the usual ease and certainty ; so the attempt of the mind to grasp and understand subjects that are not within its power, or to acquire more within a definite period than it can comprehend in that time, may exhaust the cerebral energies, or deprive the brain of the power of determined and controllable action, so that it will act with uncertainty, and strangely, or even wildly.

When any of the organs are interrupted suddenly in course of energetic action, there is a shock and a pain and consequent diminished power—as when the cutaneous action is arrested by a check of perspiration, or the muscular action when we run violently against an unexpected obstacle ; so the mind, when it has been long and confidently and hopefully laboring on and for a certain object, suffers from this sudden interruption and disappointment.

On these principles we may explain the origin of those cases which are said to be caused by excessive mental labor, excitement, fatigue, perplexity, and excessive study of special subjects, politics, business, law-suits, and the depression and disturbance in consequence of losses of property, or disappointment in love, ambition, hope of wealth, or in any desirable plans of happiness.

Probably mental exertion, labor or struggle devoted to any other subjects or pursuits than these herein quoted, in the same disproportion to the power of mental action, or the same unnatural degree of excitement from any other causes, would produce insanity as well as those of which the hospital reports have spoken. It is not, then, merely these special causes, but the undue mental action which they created, that should be deemed the cause or causes of the cerebral disorder. And any undue

mental action, or any abuse of the mind applied to, or created by, any other subjects, would produce the same result.

All the functions are in some degree under the control of habit ; and when the habit is established, it gains more and more power. Whether the habit be the best or not, whether it originally were easy or difficult, when it has been once established we continue to act according to it without effort and unconsciously. Thus the sailor, having acquired the reeling gait at sea, continues to walk in the same manner on land, and finds it hard to do otherwise. The soldier, having established the stiff strut, does not walk with the flexible grace of other men when out of the ranks. So also the mental habits control us, even when the occasion does not require them. The engineer insensibly estimates the measure and position of objects mathematically ; the statistician counts them ; the painter groups and arranges them ; the merchant estimates their commercial value ; the sensualist considers whether through them or by them his appetites and passions can be gratified ; and the punster at once sees the double meaning of words that admit of this forced and unnatural interpretation. The ruling habit of body, mind, or affection, governs both in season and out of season, whether there be occasion or not.

On this principle all irregular mental habits gain power, and sometimes result in insanity. Persons who are odd, and indulge in singular notions, who love to give strange and startling opinions, which are indeed unsound as far as they go, who allow themselves to think and say unusual things, form a habit of oddity and strangeness which at last may control them and establish mental derangement.

Day dreaming comes under the same law. It is a very seductive habit. The imagination loves to create positions and circumstances which are the most flattering. There the dreamer forms for himself a character, and a series of actions and a relation to his associates or to the world, which would be to him the most satisfactory. This active imagination becomes his demon, his ever present mentor to make use of present circumstances to encourage and harmonize with his favorite mania. He looks upon men and scenes and events in their bearing on his imaginary life, or he distorts them to suit this purpose. Thus he loses the habit, and in some degree and perhaps entirely, the power, of seeing the world and things as they really are. And when this habit obtains control over him, he is acknowledged to be insane.

Faulty education is another cause belonging to the same class. Those who in early years receive wrong notions of the world and life, who in childhood and youth indulge in expectations which manhood cannot realize, create hopes that must be disappointed. They lead a dreamy life, with ideals which they have not power to fulfil. They look for circumstances which will not belong to them. They strive for stations and advantages which their education or their talents or their position will not gain for them. They suffer from a vain and unsatisfied desire, an ineffectual struggle, a disappointed confidence, and they sink into weakness and sometimes into lunacy.

The opposite extreme of *mental idleness*, without occupation, without habits of exertion, and even seclusion, sometimes produces the same results of mental weakness and inability to act under control.

The painful affections and emotions, grief, anxiety and disappointment, produce no small portion of the cases of insanity: 2882 out of 22,113, or about 13 per cent. of all whose origin is known.

The depressing emotions are more injurious to mental health, as well as to physical health, than the exhilarating ones. Many are the cases of insanity charged to distress, and anxiety, and trouble, to losses, and dangers, and fears, but very few to hope and bright anticipations, to joy and success. One can revel with impunity in almost unbounded cheerfulness and enjoyment and hope, but the mind falters under carking care, and wasting grief, and harrowing anxiety. "Laugh and be fat," though said as mere comedy, is yet a serious physiological axiom as applied to the body, and it is no less true as applied to the mind.

Many of these emotional causes of insanity come upon all men. All are called to grieve for the loss of friends. Most suffer in doubt and anxiety from the sickness of relatives. These sources of lunacy seem to be necessarily inherent in our constitution. But there are other sources of grief which error, wrong and vice produce unnecessarily. Domestic troubles, variances, quarrels, the misconduct of members of the family, the ill-treatment from husbands or parents or other kindred, the difficulties among neighbors or associates, are somewhat fruitful sources of mental disorder.

The maddening passions—anger, hate, malignity, jealousy, pride, and violence of temper, have a similar disturbing influence on the health of the mind; while the tender and generous passions of love and charity give it serenity, and self-control, and power.

Through one or the other of these channels, through either the mind, the emotions, or the passions, most of the moral causes of insanity operate.

The relations of property and of poverty to man, the labors and the anxieties, the hopes and the disappointments, connected with the one, and the fear, distress and suffering, connected with the other, produced 2280 out of 22,113, or 10 per cent. of the cases whose causes were known and reported. The mental labor in the management of business has the same effect on the exercise of the brain as study, and may be as excessive and as injurious; and when great anxiety is added to this, especially in business of doubtful issue, as in speculations, or dealing in lottery tickets, or any matters where hope is great but on uncertain ground, as in lawsuits, there is, or may be, the three-fold cause of mental disorder—excessive cerebral action, anxiety and disappointment.

Poverty itself produces the same result, and brings with it much of the mental labor of property without its supporting aids. There is then a struggle to obtain, with less power to sustain the effort, and accompanied with the depressing care and anxiety, without the hope to buoy up the spirits and energize the mind.

Religion acts powerfully on the mind and heart; consequently it affects the brain through the intellect and the affections. There is a great struggle to comprehend the doctrines and the mysteries. There is intense exhilaration joined with the hopes, and an agonizing anxiety joined with the fears, that are connected with the eternal interests.

There is so great a prize to strive for and to gain, and so terrible a destruction to be avoided, that the mind labors with all-absorbing energy to secure that which is offered, and escape that which is threatened, and the over-tasked brain sometimes falters and then acts with uncertainty.

In other cases the insanity assumes the religious form, although religion, or its study, or its hopes, are not the cause. Dyspepsia, hepatic disorder, or low health in any other form, or any other cause, may depress the cerebral energies; then the mind becomes enfeebled, the spirits low, and hope gives place to doubt, or fear, or perhaps despair. Then the thoughts rest upon some dreaded evil, which the imagination creates. Then a man sometimes fears poverty, or that his family or friends are in trouble, or that he shall not accomplish some desired purpose. And frequently he imagines the worst evil that can be presented to him; then he looks to his eternal, his greatest interests, and considers these all as lost; and believes he is ruined forever. With some reason left, he looks for the cause of so great an evil, and finds it in himself, and thinks he is thoroughly wicked, that his sins are beyond the reach of pardon, and therefore his destruction must necessarily follow.

The various causes of insanity connected with religion, its excitements and its depressions, produced 1867 out of 22,113, or about 8 per cent. of all whose anterior history is known.

I have thus noticed, either specially or generally, the various circumstances, conditions, habits and influences that are supposed to disturb mental health. Those already known and stated are very many, and we have no reason to suppose there may not be very many more. They are here and about us, and everywhere in the civilized world, and, to some extent, in the savage world. They are inherent in the very organization of some; but most of them come from abroad, or from the indiscreet use or abuse of one's own powers of body or mind.

It is a melancholy consideration to know that some or many of these causes of insanity are peculiarly abundant in this country and in this age, and some of them are increasing in frequency and disturbing force. Almost the whole class of accidents, injuries and exposures has increased. With the new improvements in the mechanic arts, the multiplication of machinery, the new and sometimes uncontrolled, if not uncontrollable, motive powers, and with the new modes of travel, more accidents happen, more injuries are inflicted, and in their way they multiply the causes and the cases of insanity.

In course of the same progress of improvement, there are more chemical agents discovered, and numberless new applications of this science and its discoveries to practical use in the common arts and business of life. Men are therefore more exposed to minerals, acids, gases, paints, dye-stuffs, and combustible and explosive elements or mixtures, which are sometimes more or less injurious to health, or cause accidents dangerous to those who are connected with them, and consequently multiply the causes and the cases of lunacy.

The causes connected with mental labor, in its manifold applications, have increased and are increasing continually. In the progress of the age, education has made rapid advances both in reaching a wider cir-

cle of persons and in multiplying the subjects of study. The improvements in the education of children and youth have increased their mental labors, and imposed more burdens upon their brains, in the present than in the preceding ages. The proportion of children who are taught in schools increases every year in the United States, and in most civilized nations. There are more and more of those whose love of knowledge, whose sense of duty, whose desire of gratifying friends, and whose ambition, impel them to make their utmost exertion to become good scholars. Thus they task their minds unduly, and sometimes exhaust their cerebral energies and leave their brains a prey to other causes which may derange them afterwards.*

The new sciences which have been lately discovered, or the old sciences that were formerly confined to the learned, but are now simplified and popularized, and offered to the young as a part of their education, multiply the subjects of study and increase the mental labor of almost all in schools.

Men and classes of men, such as in the last century would have thought of nothing but how they should obtain their bread, are now induced to study subjects and pursue sciences, and burden their brains with great and sometimes with excessive labor. New fields of investigation have been laid open within the last hundred, and especially within the last fifty, years. New inducements are offered, so that a greater variety of tastes is invited to their peculiar feasts of knowledge. Many more now study phrenology, metaphysics, mathematics, physiology, chemistry, botany, and other branches of natural history, to say nothing of mesmerism, biology, &c., and thus they compel their brains to labor with more energy and exhausting zeal than those of any former generation. In this multiplication of students there are some who attempt to grapple with subjects that they cannot master, and sink under the burden of perplexity which they cannot unravel.

In this general increase of mental activity, some men become interested and give their minds intensely to the study of public topics, politics, State or National affairs, and the subjects of legislation, the banking system, tariff, anti-rent, anti-masonry, the license question, &c., or to public moral questions, anti-slavery, temperance, and general or special reforms, any or all of which impose upon them great anxiety and mental labor.

In this country, where no son is necessarily confined to the work or employment of his father, but all the fields of labor, of profit and of honor are open to whomsoever will put on the harness and enter therein, and all are invited to join the strife for that which may be gained in each, many are in a transition state, from the lower and less desirable to the higher and more desirable conditions. They are struggling for that which costs them mental labor and anxiety and pain. The mistake or the ambition of some leads them to aim at that which they cannot reach, to strive

* In an admirable lecture recently published by Dr. Isaac Ray, the superintendent of the Butler Hospital for the Insane, the errors and effects of the indiscreet and excessive action of the brain in the education of youth are clearly set forth by the philosophical author. This little work ought to be in the hands of every parent and teacher of youth.

for more than they can grasp, and their mental powers are strained to their utmost tension ; they labor in agitation ; and they end in frequent disappointment. Their minds stagger under the disproportionate burden ; they are perplexed with the variety of insurmountable obstacles, and they are exhausted with the ineffectual labor.

But in an uneducated community, or where the people are overborne by despotic government or inflexible customs, where men are born in castes and die without overstepping their native condition, where the child is content with the pursuit and the fortune of his father, and has no hope or expectation of any other, there these undue mental excitements and struggles do not happen, and men's brains are not confused with new plans, nor exhausted with the struggle for a higher life, nor overborne with the disappointment in failure. Of course, in such a state of society these causes of insanity cannot operate. But in proportion as education prevails and emancipates the new generations from the trammels and the condition of the old, and the manifold ways of life are opened to all, the danger of misapplication of the cerebral forces and the mental powers increases, and men may think and act indiscreetly and become insane.

The same is distinctly manifested in the pursuits of business. There are many new trades and new employments ; there are new schemes of increasing wealth, new articles of merchandize, and speculations in many things of new and multiplying kinds. All these increase the activity of the commercial world. The energy of men of new enterprises gives a hope of actual value and a momentary market value to some new kinds of property. The consequent inflation or expansion of prices, to a greater or less degree, makes many kinds of business more uncertain, and many men's fortunes more precarious. This increases the doubts and perplexities of business, the necessity of more labor and watchfulness, greater fear and anxiety, and the end is more frequently in loss, and failure of plans, and mental disturbance.

Besides these uncertainties which may happen to any, there are more that enter the free and open avenues to occupations, which hold out high and flattering promises, and for which they are unprepared, in which they must struggle with greater labor and anxiety than others, and in which they must be more frequently disappointed.

Besides these causes of mental disturbance in the new and untried fields of study and business and commerce, there are other causes in the social position, which is subject to like change. Many are passing, or have passed, from a comparatively retired, simple, and unpretending, to the showy, the fashionable, or the cultivated style of life. In this transition state there must be more mental labor for those who are passing from one condition to the other ; there must be much thought and toil, much hope and fear, and much anxiety and vexation to effect the passage and to sustain one's self in the new position.

With the increase of wealth and fashion, there come also more artificial life, more neglect of the rational laws of self-government, more unseasonable hours for food and for sleep, more dissipation of the open, allowable and genteel kind, and also more of the baser, disreputable and concealed sorts.

Consequent upon the new labor and new positions and new style of life, there comes more low health, from exhausting and perplexing cares and toils of business, of social life and fashion, and from frequent irregular habits of diet and regimen. The secondary consequences of impaired health, of diminished vital forces, dyspepsia, debility, consumption, gout or other disease, are manifested in the brain; and then nervousness frequently, and insanity sometimes, follows.

Thus we see, that with advancing civilization, and especially in the present age and in our own country, there is a great development of activity of mind, and this is manifested in most of the employments, in the conduct of the mechanic arts, agriculture, trade and commerce—in the attention to the professions, and to other subjects of study, and to politics. This increase of mental activity and of cerebral action comes without a corresponding increase of discretion to guide it, and of prudence to restrain it.

And this proneness to mental action must prevail until the world learn the nature and the limit of their mental faculties, the connection of these with the brain, and the connection of the brain with all the other physical organs, and govern themselves accordingly.

In review of this history of the causes of insanity, we find that very few of them diminish with the progress of the world. Some are stationary, remaining about the same in the savage, the barbarous and the civilized state, while many of them increase and create more and more mental disorder.

Insanity is, then, a part of the price which we pay for civilization. The causes of the one increase with the developments and results of the other. This is not necessarily the case, but it is so now. The increase of knowledge, the improvements in the arts, the multiplication of comforts, the amelioration of manners, the growth of refinement and the elevation of morals, do not of themselves disturb men's cerebral organs and create mental disorder. But with them come more opportunities and rewards for great and excessive mental action, more uncertain and hazardous employments, and consequently more disappointments, more means and provocations for sensual indulgence, more dangers of accidents and injuries, more groundless hopes and more painful struggle to obtain that which is beyond reach, or to effect that which is impossible.

The deductions, then, drawn from the prevalence and effects of causes, corroborate the opinion of nearly all writers, whether founded on positive and known facts, on analogy, on computation or on conjecture, that insanity is an increasing disease. In this opinion all agree.

